T-4000

SERIAL NO. 3317

ONKYO SERVICE MANUAL

SYNTHESIZED
FM STEREO/AM TUNER
MODEL T-4000

Black model

BUDN, BUD	120V AC, 60 Hz
BUG	220V AC, 50Hz
BUU, BUUX	110/120/220/240V AC, 50/60Hz
BUQA, BUQB	240V AC, 50 Hz

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

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ONKYO AUDIO COMPONENTS

SPECIFICATIONS

FM:	
Tuning Range:	87.9-107.9MHz(200kHz steps: U.S.A model) 87.5-108.0MHz(50kHz steps: European model) 87.9-107.9MHz(200kHz steps) or 87.5-108.0MHz(50kHz steps) (Wor ldwide model)
Usable Sensitivity:	Mono: 11.2dBf, 1.0 μV IHF 0.9 μV 75ohms DIN Stereo: 2.0 μV 75ohms Mono: 11.2dBf, 2.0 μV 1HF (120V model) Stereo: 17.2dBf, 4.0 μV (120V model)
50dB Quieting Sensitivity:	Mono: 1.7 μV 75ohms Stereo: 1.7 μV 75ohms Mono: 16.1dBf, 3.5 μV (120V model) Stereo: 36.1dBf, 35 μV (120V model)
Capture Ratio:	1.5dB
Image Rejection Ratio:	40dB (120V model) 80dB (Other models)
IF Rejection Ratio:	90dB
Signal-to-Noise Ratio:	Mono: 73dB Stereo: 66dB
Alternate Channel Attenuation:	50dB IHF (±400kHz) (120V model)
Selectivity:	55dB DIN (±300kHz, 40kHz dev.) (Other models)
AM suppression Ratio:	50dB
Harmonic Distortion:	Mono: 0.1% Stereo: 0.2%
Frequency Response:	30-15, 000Hz ±1.5dB
Stereo Separation:	40dB at 1kHz 30dB at 70-10,000Hz
Muting Level:	2.0 μV, 75ohm 17.2dBf, 4.0 μV
Output Voltage:	500mV (120V model) 750mV (Other models)
AM:	
Tuning Range:	530-1620kHz(10kHz steps) (U.S.A. model) 522-1611kHz(9Hz steps) (European model) 530-1620kHz(10kHz steps) or 531-1602kHz(9kHz steps) (Worldwide model)
Usable Sensitivity:	25 μV
Image Rejection Ratio:	40dB
1F Rejection Ratio:	40dB
Signal-to-Noise Ratio:	40dB
Harmonic Distortion:	0.8%
Output voltage:	150mV
GENERAL:	
Dimensions(W×H×D):	435 × 71 × 265mm 17-1/8" ×2-7/8" ×10-3/8"
Weight:	2.6kg., 5.71bs.

Specifications and features are subject to change without notice.

SERVICE PROCEDURES

1. Safety-check out

(Only U.S.A. model)

After correcting the original service problem,perform the following safety check before releasing the set to the customer.

Connect the insulating-resistance tester between the plug of power suuply cord and chassis.

Specifications: 3.3Mohm ±10% at 500V.

2. Memroy preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in and the power switch turned on and off once in order to charge the back-up system. Note that since this is not a permanent memory,the power switch must be turned on and off a few times each month to keep the back-up system operative. The period of time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shorter when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

3. Voltage Selector (Back Panel)

W models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on. This switch is set to 220V at the factory. Voltage is changed by sliding the groove in the switch with a screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on. Models without a voltage selector can only be used in areas where the power supply is the same as that of the unit.

4. Tuning Step Frequency Switch (Back Panel)

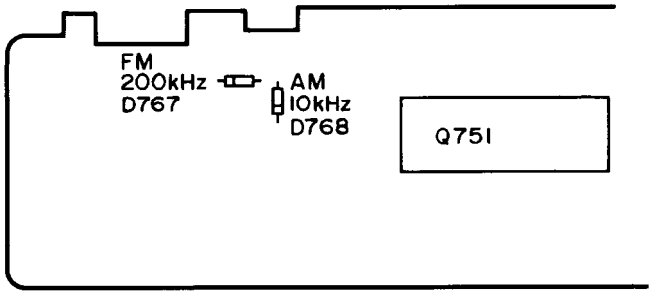
W models are equipped with a switch for the AM (9kHz/10kHz) and FM (50kHz/100kHz) bands. The switch should be set to the proper steps for the radio broadcast frequencies in your area.

5. Changing the band step

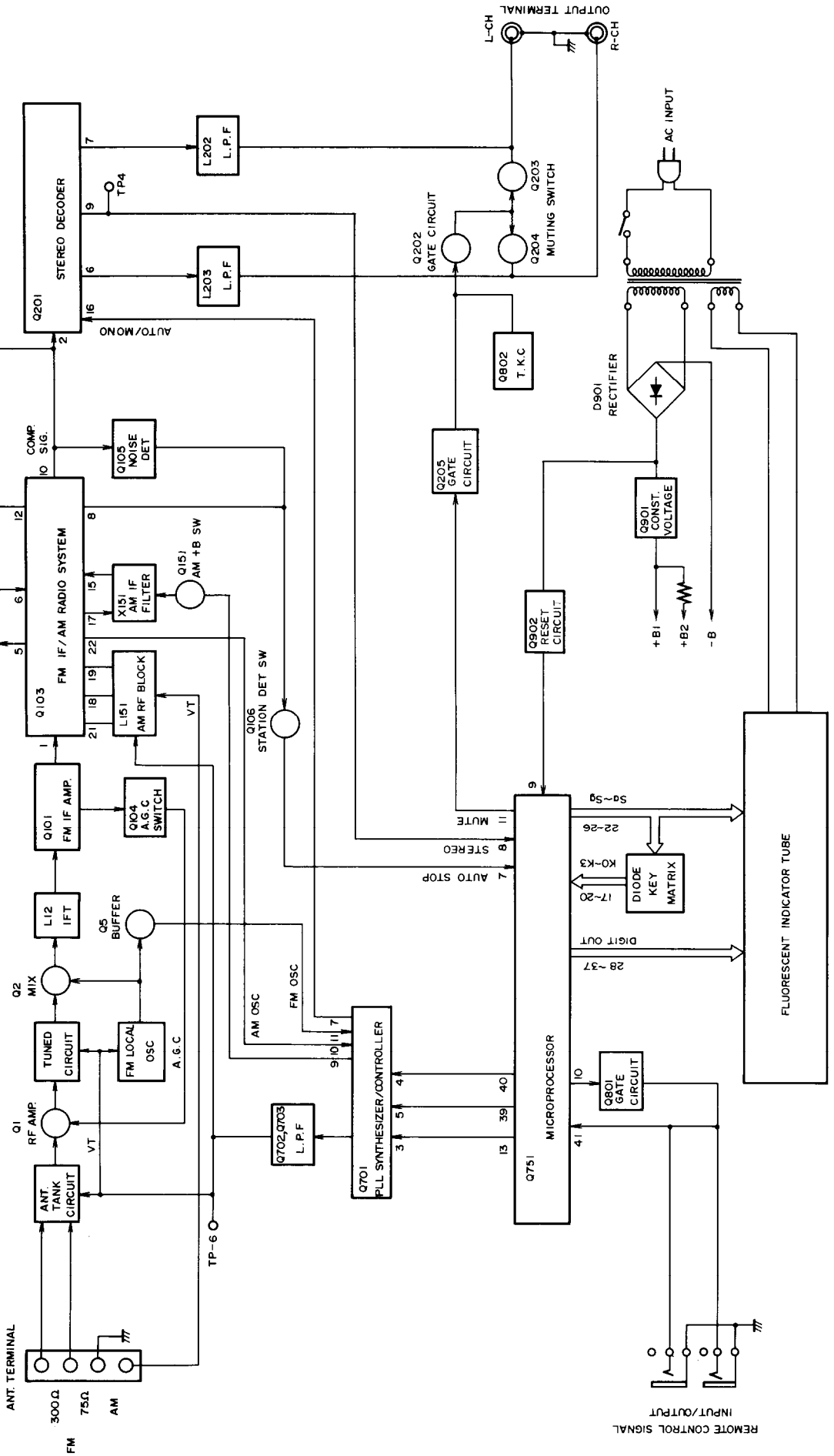
With the exception of the models below, a BAND STEP selector switch is not provided.

MODEL	BAND STEP	D767	R118
UD	200kHz → 50kHz	Eliminated	15kΩ → 30kΩ
UG/UQ	50kHz → 200kHz	Additional	30kΩ → 15kΩ

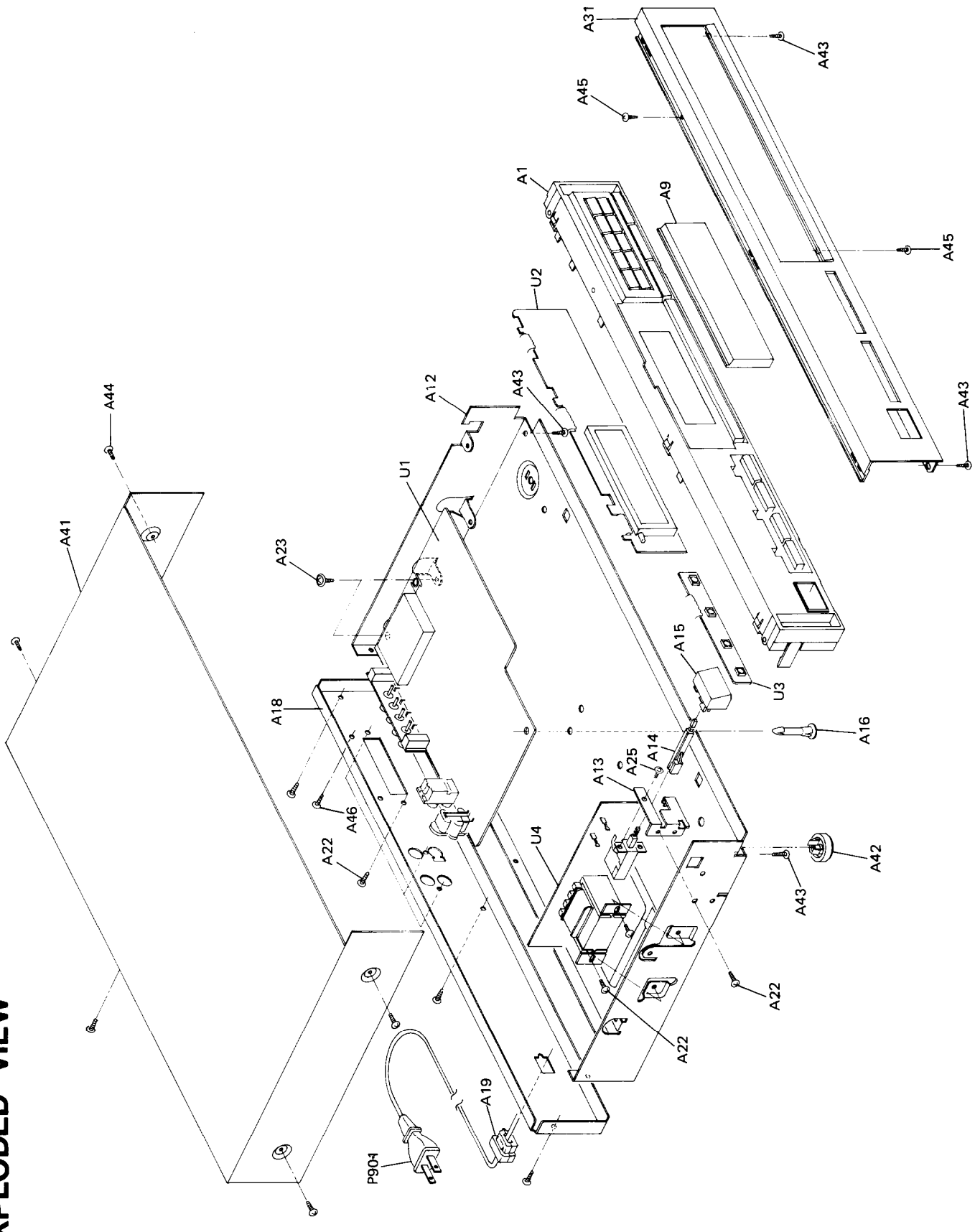
In D767, 1SS133 (Part No. 223163) is used. R118, with the muting amplitude determined, is on the bsck panel side side of the main circuit printed circuit board assemdly test points TP–1 and TP–2.



BLOCK DIAGRAM



EXPLODED VIEW



PARTS LIST

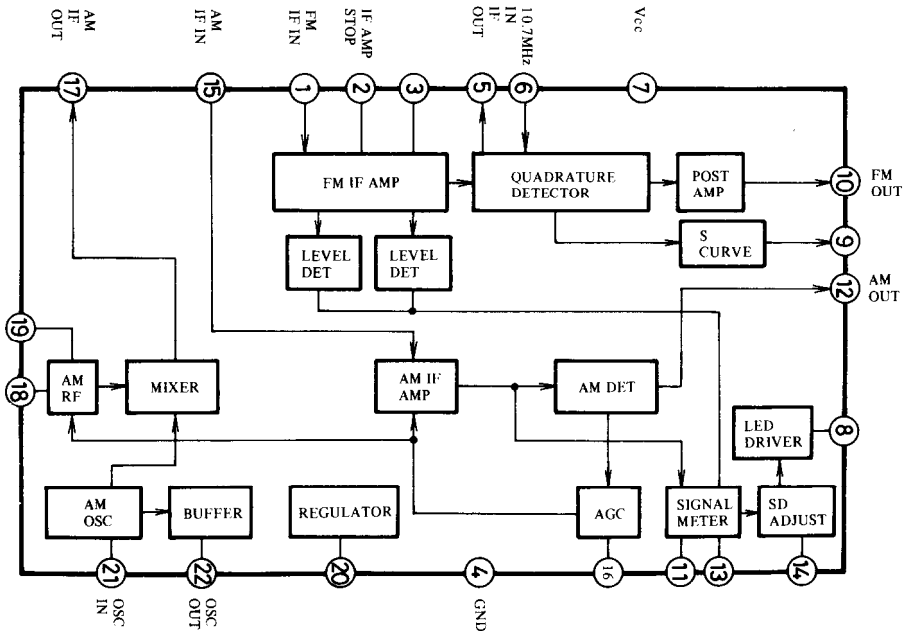
REF. NO.	PART NO.	DESCRIPTION
A1	27110398B	Front bracket
A9	28191458C	Clear plate
A12	27100116-2	Chassis
A13	27141254	Bracket, power
A14	27260170A	Joint, switch
A15	28323241-1A	Knob POWER
A16	27190511	Holder
A18	27121220	Back panel 〈D〉
	27121220-1	Back panel 〈G〉
	27121220-3	Back panel 〈W〉
	27121220-4	Back panel 〈QA/QB〉
A19	27300750	⚠Strainrelief
A22	834430088	3TTS+8B(BC),Tapping screw
A23	831130088	3TTW+8B,Tapping screw
A25	82143006	3P+6FN(BC),Pan head screw
A31	1A133121	Front panel ass'y
A41	28184350A	Top cover
A42	27175217	Leg
A43	833430080	3TTP+8P(BC),Tapping screw
A44	834430088	3TTS+8B(BC),Tapping screw
A45	838430088	3TTB+8B(BC),Tapping screw
A46	834230108	3TTS+10B(Ni),Tapping screw 〈G/QA/QB〉
P901	253142A	⚠AS-UC-7#18,Power supply cord 〈D〉
	253148	⚠AS-CEE,Power supply cord 〈G/W〉
	253118	⚠AS-SAA,Power supply cord 〈QA〉
	253104	⚠Power supply cord 〈QB〉
S902	25065123	⚠NSS-1258P,Voltage selector switch 〈W〉
U1	1A082561-1	NARF-3261-1,FM/AM tuner pc board ass'y 〈D〉
	1A082561-1A	NARF-3261-1A, FM/AM tuner pc board ass'y 〈G/QA/QB〉
	1A083561-1B	NARF-3261-1B, FM/AM tuner pc board ass'y 〈W〉
U2 ⟶	1A082562-1	NADIS-3262-1,Display circuit pc board ass'y 〈D〉
	1A082562-1A	NADIS-3262-1A, Display circuit pc board ass'y 〈G〉
	1A083562-1B	NADIS-3262-1B, Display circuit pc board ass'y 〈W〉
U3	1A082563-1	NASW-3263-1,Switch pc board ass'y
U4	1A082564-1	⚠NAPS-3264-1,Power supply circuit pc board ass'y 〈D〉
	1A082564-1A	⚠NAPS-3264-1A, Power supply circuit pc board ass'y 〈G〉
	1A083564-1B	⚠NAPS-3264-1B, Power supply circuit pc board ass'y 〈W〉
	1A083564-1C	⚠NAPS-3264-1C, Power supply circuit pc board ass'y 〈QA/QB〉

NOTE: 〈D〉:Only 120V model
〈G〉:Only 220V model
〈W〉:Only Worldwide model
〈QA〉:Australian model
〈QB〉:British model

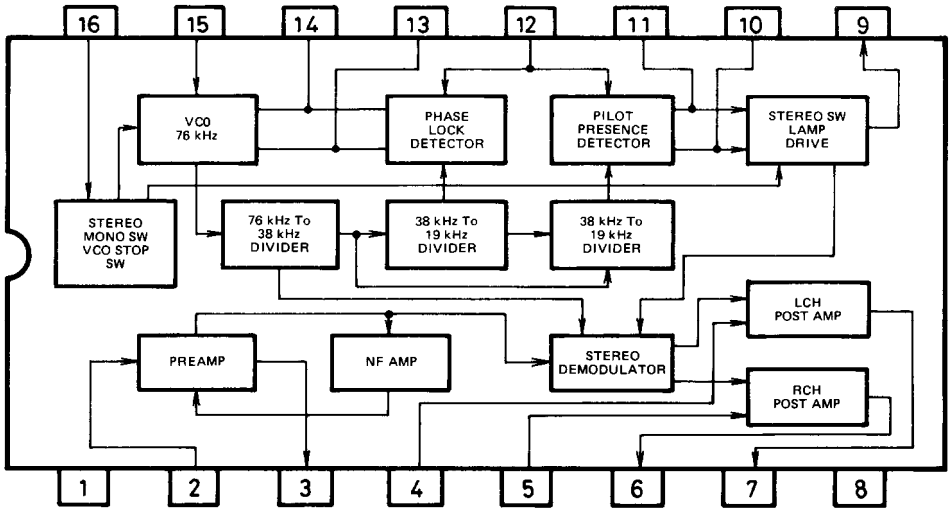
NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBERS SPECIFIED.

BLOCK DIAGRAM OF IC

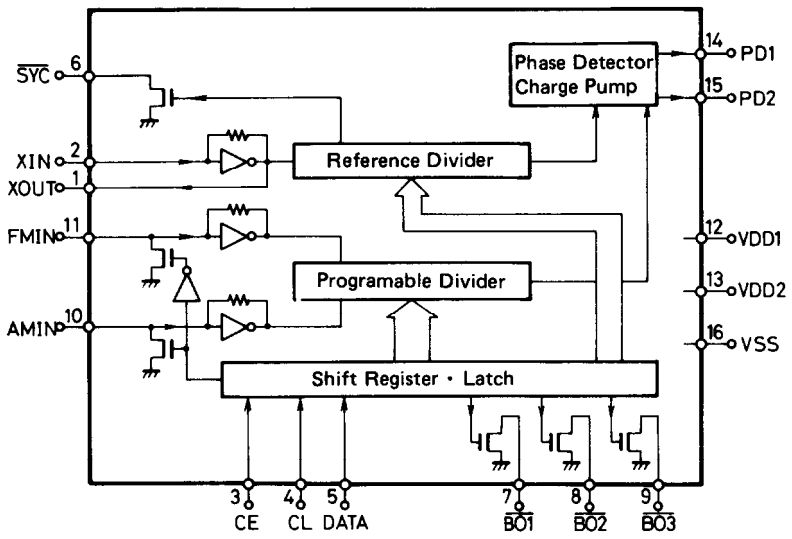
LA1265 (FM IF/AM radio system)



μPC1161C3 (FM stereo decoder)



LM7001 (PLL frequency synthesizer)



Pin No.	Terminal	Description
1	XOUT	Connect to the 7.2 MHz crystal oscillator.
2	XIN	
3	CE	Chip enable terminal. Connect to the PLL terminal of μPD7538ACU–218.
4	CL	Serial clock input terminal. Connect to the CLOCK terminal of μPD7538ACU–218.
5	DATA	Serial data input terminal. Connect to the DATA terminal of μPD7538ACU–218.
6	SYN	Not used.
8	BAND1	Band selector output terminal.
9	BAND2	

BAND	BAND 1	BAND 2
FM	L	H
AM	H	L

7	BO1	This is the output terminal for AUTO/MONO. 'H' when AUTO.
10	AMIN	AM local oscillator input terminal.
11	FMIN	FM local oscillator terminal.
12	VDD 1	Power supply terminal for back-up.
13	VDD 2	Power supply terminal.
14	PD1	Charge pump output of the phase detector which constitutes the PLL. High level is output when the divided local oscillator frequency is high than the reference frequency.
15	PD2	In the opposite case, low level is output. Floating occurs when the frequencies matched. The output is applied to the variable capacitor diode in the local oscillator through the low pass filters.
16	Vss	Ground terminal.

μPD7538ACU-218 (Microprocessor)

Terminal Descriptions

Pin No.	Terminal	Description
1	RESET	Reset signal input terminal. "H" when active.
2 3	CL1 CL2	Connect to the 600kHz ceramic oscillator.
4	VPRE	Power source supply terminal for output buffer of FIP controller/driver.
5	VLOAD	Pull down resistor connection terminal for FIP controller/driver.
6	STANBY	Stand by input terminal. "L" when active.
7	AUTO STOP	Auto stop signal input terminal. Auto tuning stops when this terminal becomes the high level.
8	STEREO	Stereo broadcast detector input terminal. "L" when stereo broadcast.
9	POWER OFF	This is the input terminal for detection of the stoppage of electric current. "L" when the stoppage of electric current.
10	SYSTEM OUT	System code output terminal. "L" when active.
11	MUTE	This is the output terminal for muting control. "L" when active.
12	AUTO/MONO	This is the output terminal for AUTO/MONO switching. "H" when active.
13	CE	Connect to the terminal CE of PLL IC(LM7001).
14	AM	This is the output terminal for AM band control. "H" when AM band.
15	FM	This is the output terminal for FM band control. "H" when FM band.
16	DISPLAY	This is the display output terminal.
17 18 19 20	K0 K1 K2 K3	These are the input terminal for key return signal source and diode matrix signal. "H" when active.
21	VDD	This is the device power source terminal. At the time of operation, the supply is 5V. The internal date memory(RAM) is maintained by means of the supper capacitor.
22 23 24 25 26 27 28	D7 D6 D5 D4 D3 D2 D1	These are the digit signal and key scan output terminals. "H" when active.
29 30 31 32 33 34 35 36 37	Si Sh Sg Sf Se Sd Sc Sb Sa	These are the segment terminals. "H" when active.
38		Not used.
39	DATE	Serial date output terminal for PLL IC(LM7001).
40	CLOCK	Serial clock output terminal for PLL IC(LM7001).
41	SYSTEM IN	System code input terminal. "H" when active.
42	Vss	Ground terminal.

Key and diode matrix

	D1 (28)	D2 (27)	D3 (26)	D4 (25)	D5 (24)	D6 (23)	D7 (22)
K3(20)	P4	P8	MEMORY	AM		SYS DIS	
K2(19)	P3	P7	SHIFT	FM	P.SCAN	AM9	AUTO/MONO
K1(18)	P2	P6	P10	UP	SLEEP	BAND 1	PRESET
K0(17)	P1	P5	P9	DOWN	AUTO/MONO	BAND 0	SLEEP
						Diode matrix	

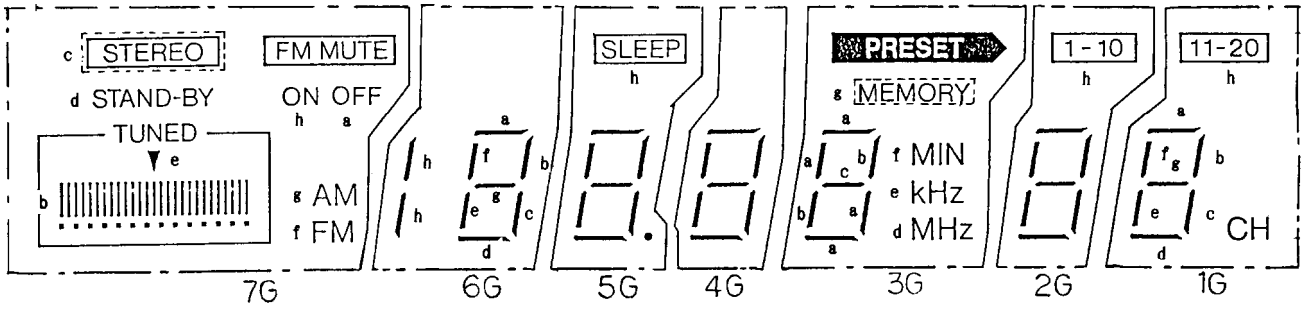
BAND 0/1(FM band setting)

BAND 1	BAND 0	Region	Frequency range	Channel space	Reference frequency	IF frequency
0	0	Europer	87.50~108.00MHz	50kHz	25kHz	10.7MHz
0	1	U.S.A.	87.9 ~107.9MHz	200kHz	25kHz	10.7MHz
1	1	Saudi Arabia	87.50~108.00MHz	50kHz	25kHz	10.7MHz

AM

AM 9	Region	Frequency range	Channel space	Reference frequency	IF frequency
0	Europer	522~1611 kHz	9kHz	9kHz	450kHz
1	U.S.A.	530 ~ 1620 kHz	10kHz	10kHz	450kHz
0	Saudi Arabia	351 ~ 1602 kHz	9kHz	9kHz	450kHz

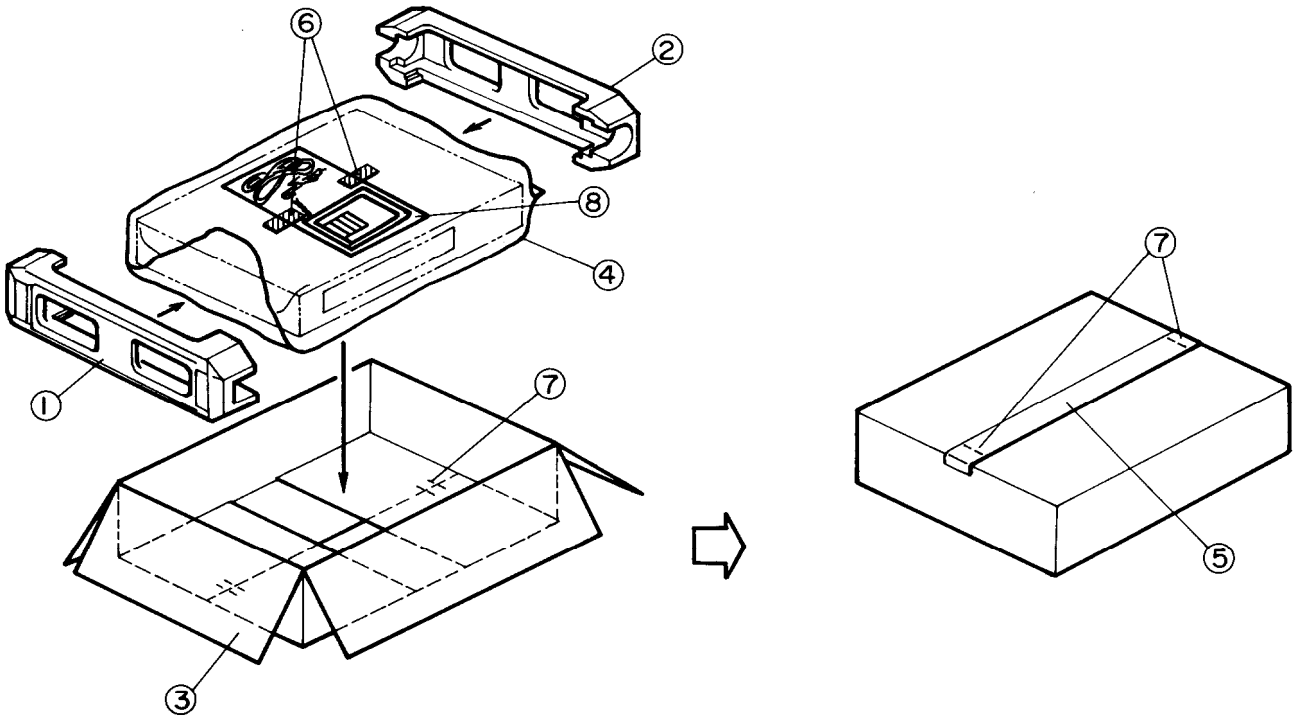
FIP10BBM8 (Fluorescent tube)



TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ELECTRODE	F	F	7G	P (S4)	P (i)	P (h)	7G	P (g)	P (S3)	P (S2)	7G	NC	6G	NP	NP	6G	NP	NP	5G	NP
TERMINAL NO.		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
ELECTRODE		NP	4G	NC	3G	NP	NP	P (f)	3G	P (e)	P (d)	2G	P (c)	P (b)	P (a)	1G	P (S1)	NP	F	F

Notes F: Filament NP: No Pin
G: Grid NC: No Connection
P: Anode

PACKING VIEW



REF. NO.	PART NO.	DESCRIPTION
1	29091315	Pad L
2	29091316	Pad R
3	29051861-1	Master carton box
4	29100037A	650×500mm,Poly-vinyl bag
5	260012	50×700 mm,Damplon tape
6	261504	30×300 mm,Adhesive tape
7	282301	Sealing hook
8		Accessary bag ass'y
	120V model	
	29341379	Instruction manual 〈Only U.S.A. model〉
	29341380	Instruction manual 〈Only Canadian model〉
	292064B	FM antenna
	232140	NMA-3057,AM loop antenna
	2010098	Connection cord
	2010169	Connection cord for RI
	29365019	Warranty card 〈Only U.S.A. model〉
	29358002F	Service station list 〈Only U.S.A. model〉
	29100006A	350×250mm,Poly-vinyl bag
	220V/240V models	
	29341380	Instruction manual
	292092	FM antenna
	232140	NMA-3057,AM loop antenna
	2010098	Connection cord
	2010169	Connection cord for RI
	25060123	YAE21-0120A,FM adaptor 〈Only 240V model〉
	29100006A	350×250mm,Poly-vinyl bag
	Worldwide model	
	29341380	Instruction manual
	292064B	FM antenna
	232140	NMA-3057,AM loop antenna
	2010098	Connection cord
	2010169	Connection cord for RI
	25055018	CV-K-1,Conversion plug
	25060123	YAE21-0120A,FM adaptor
	29100006A	350 ×250mm,Poly-vinyl bag

ADJUSTMENT PROCEDURES

Preparation

• Input

FM mono: 1kHz, 75kHz devi., 60dB/μV (65dBf)
FM stereo: 1kHz, L+R 67.5kHz devi.: Pilot signal 19kHz 7.5kHz devi.
AM: 400Hz, 30% mod.,

Reference specifications

Tuned voltage	AM	530 kHz (522kHz)	1.3 ± 0.4V
		1620 kHz (1611kHz)	7.5 ± 1.0V
	FM	87.9MHz	1.5 ± 0.5V
		107.9MHz	8.0 ± 0.5V
Muting level			10 ± 3dB
Muting width			35 ± 10kHz
Auto stop level		AM	Less than 68dB/m
		FM	Less than 16 dBμ
Stereo indicator level			Less than 17dBμ

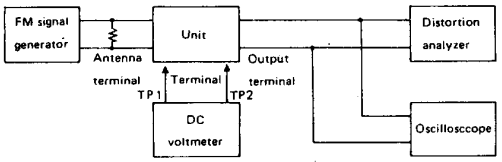
FM Section

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuned frequency	Output indicator	Adjustment point	Adjust	Remarks
FM IF	1	Fig. 1	99.1 MHz, 1 kHz 75 kHz devi. 65 dBf (60 dB μ)		99.1 MHz	DC voltmeter	L101	0 ± 20 mV	Muting switch to MONO. Repeat the steps 1 and 2 until no further adjustment is necessary.
	2					Distortion analyzer	L102	Minimum	
Muting Level	1	Fig. 1	99.1 MHz, 1 kHz 75 kHz devi. 17.2 dBf (12 dB μ)	———	99.1 MHz	Oscilloscope	R101	Signal	
	2		16.2 dBf (11 dB μ)					No signal	
VCO		Fig. 2	99.1 MHz, 1 kHz 75 kHz devi. 65 dBf (60 dB μ)		99.1 MHz	Frequency counter	R201	19,000 ± 10 Hz	Muting switch to STEREO
Stereo Distortion		Fig. 3	99.1 MHz, Ext. modulation 65 dBf (60 dB μ)	L + R 1 kHz, 67.5 kHz devi. Pilot signal 7.5 kHz devi.	99.1 MHz	Distortion analyzer	IF core on front end	Minimum	

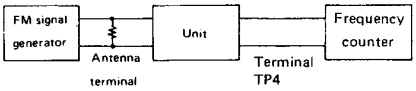
AM Section

Step	AM SG output	Tuned frequency	Output indicator	Adjust point	Adjust for
1		522 kHz (530 kHz)	Digital DC voltmeter	L151 OSC	1.3 ± 0.1V
2	603 kHz, 400 Hz 30% mod. 60 dB/m (600 kHz)	603 kHz (600 kHz)	AC voltmeter	L151 RF	Maximum
3	999 kHz, 400 Hz 30% mod. 60 dB/m (1000 kHz)	999 kHz (1000 kHz)	AC voltmeter	L152	Maximum

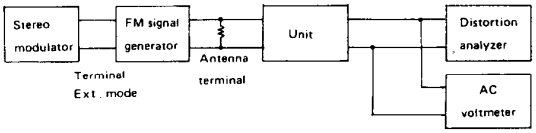
( ): 10 kHz step model



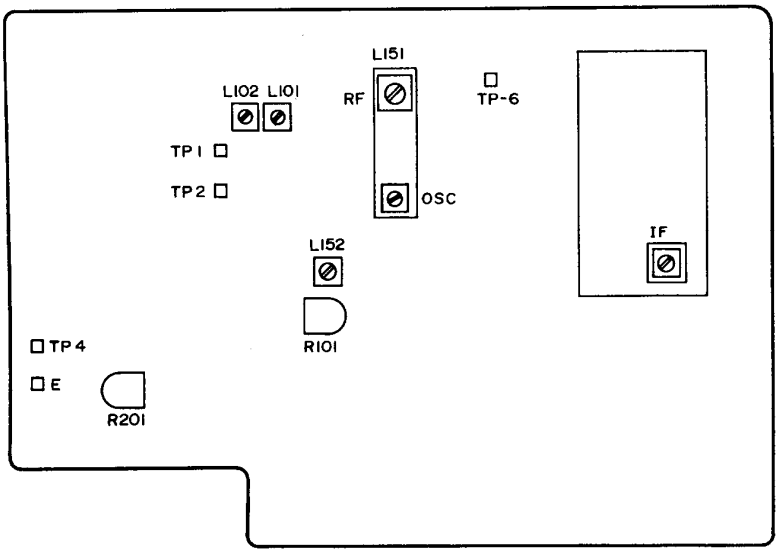
(fig. 1)

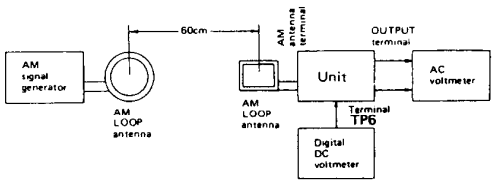


(fig. 2)



(fig. 3)





(AM)

PRINTED CIRCUIT BOARD–PARTS LIST

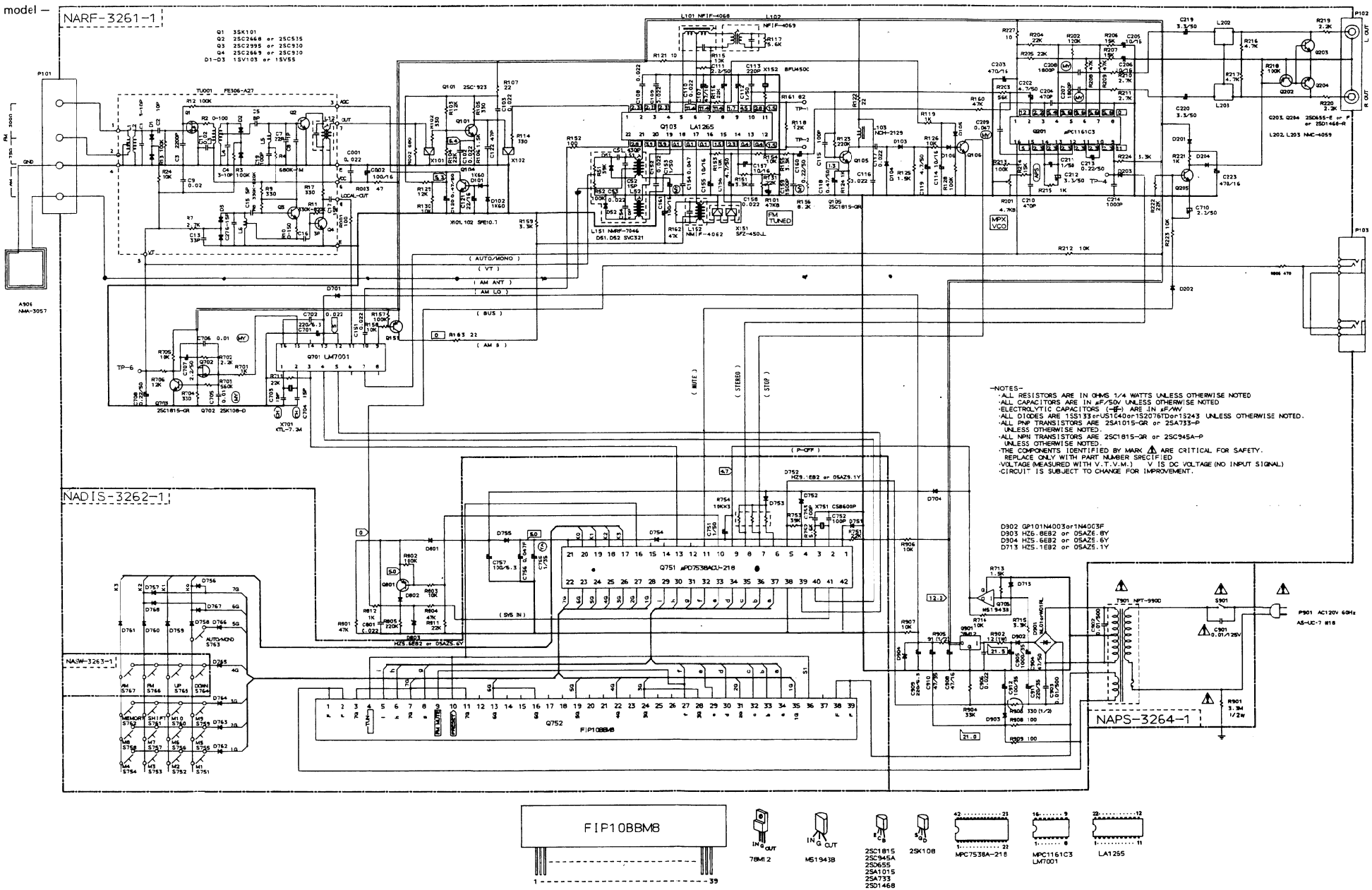
FM/AM TUNER CIRCUIT PC BOARD(NARF-3261-1/A/B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Front end	
TU001	240080	FE306-A27 〈D〉
	240074	FE407G 〈G/W〉
	ICs	
Q103	222912	LA1265
Q201	222678	μPC1161C3
Q701	22240090	LM7001
Q705	222951	M-51943B
Q901	222780122	78M12
	Transistors	
Q101	2211723	2SC1923-O
Q102	2211723	2SC1923-O 〈G/W〉
Q104,Q106	2211255 or	2SC1815-GR or
Q205	2210746	2SC945A-P
Q105,Q703	2211255	2SC1815-GR
Q151,Q202	2211455,	2SA1015-GR,
Q801	2210803 or	2SA733-P or
	2211495	JA101-Q
Q203,Q204	2211705,	2SD655-E,
	2211706 or	2SD655-F or
	2212794	2SD1468-R
Q702	2212294	2SK108-D
	Diodes	
D101,D102	223132	1K60
D103-D106	223163	1SS133
D201,D204	223150,	US1040,
	223145 or	1S2076TD or
	223124	1S2473
D202,D203	223163	1SS133
D701,D704	223163	1SS133
D707	223163	1SS133 〈W〉
D713	224650512 or	HZ5.1EB2 or
	224150512	05AZ5.1Y
D801,D802	223163	1SS133
D803	224650562 or	HZ5.6EB2 or
	224150562	05AZ5.6Y
D901	223862 or	WL01 or
	223890	W01RL
D902	223880 or	GP101N4003 or
	223896	1N4003F
D903	224650682 or	HZ6.8EB2 or
	224150682	05AZ6.8Y
D904	224650562 or	HZ5.6EB2 or
	224150562	05AZ5.6Y
	Transformers	
L101	233394	NFIF-4068
L102	233395	NFIF-4069
L152	232139	NMIF-4062
	Coils	
L001	233312	NFA-3051 〈G〉
L103	231081	NCH-2129
L201	233383	NMC-6070 〈G/W〉
L202,L203	233355A	NMC-4059
	RF block	
L151	232138	NMRF-7046
	Ceramic filters	
X101,X102	3010071	SFE10.7MA5 (RED) 〈D〉
X101-X103	3010137	SFE10.7MMK 〈G/W〉
X151	3010123	SFZ450JL
X152	3010076	BFU450C
	X'tal	
X701	3010141	XTL-7.2M
	Capacitors	
C002	354741019	100 μF,16V,Elect.
C107	354744709	47μF,16V,Elect.
C111	354780229	2.2 μF,50V,Elect.
C112	354780109	1 μF,50V,Elect.
C114	354741009	10μF,16V,Elect.
C118,C120	354784799	0.47μF,50V,Elect.
C121	354742209	22μF,16V,Elect.
C153	354780109	1 μF,50V,Elect.
C155,C157	354741009	10μF,16V,Elect.
C156,C119	354780479	4.7 μF,50V,Elect.
C160	354782299	0.22μF,50V,Elect.
C161	354741019	100 μF,16V,Elect.
C202	354780479	4.7 μF,50V,Elect.
C203	354744179	479μF,16V,Elect.
C205,C206	354741009	10μF,16V,Elect.
C210	370134714	470pF ±5%,100V,APS
C211	354780109	1 μF,50V,Elect.
C212	354780339	3.3 μF,50V,Elect.
C213	354782299	0.22μF,50V,Elect.
C219,C220	354780339	3.3 μF,50V,Elect.
C701	354722219	220 μF, 6.3V,Elect.
C707,C710	354780229	2.2 μF,50V,Elect.
C708	354782299	0.22μF,50V,Elect.
C903	335251039	0.01μF, 500V,Ceramic
C904	354784709	47μF,50V,Elect.
C905	354761029	1000μF,35V,Elect.
C908	354744709	47μF,16V,Elect.
C909	354722219	220 μF, 6.3V,Elect.
C910	354764709	47μF,35V,Elect.
C911	354762219	220 μF,35V,Elect.
C912	354761019	100 μF,35V,Elect.
	Resistors	
R101	5215046	N08HR50KBC,Semi-fixed
R201	5215044	N08HR5KBC,Semi-fixed
R902	441621204	12ohm,1W,Metal oxide film
R903	441523314	330 ohm,1/2W,Metal oxide film
R905	441629104	91 ohm,1W,Metal oxide film
	Terminals	
P101	25060085	NTM-4PDMN29,Antenna 〈D〉
	25060117	NTM-2PDML051, Antenna 〈G/W
P102	25045182	NPJ-2PDBL72 〈D〉
	25045211	NPJ-4PDBL91 〈G/W〉
P103	25045172	HSJ1003-01-020
	Switch	
S701	25065286	NSS-22112,Band 〈W〉

NOTE: 〈D〉:Only 120V model
〈G〉:Only 220/240V models
〈W〉:Only Worldwide model

SCHEMATIC DIAGRAM

– 120V model –



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PRINTED CIRCUT BOARD PARTS LIST

DISPLAY PC BOARD(NADIS-3262-1/1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q751	22240152	μPD7538ACU-218
	Fluorescent tube	
Q752	212053	FIP10BBM8
	Diodes	
D751	223163	1SS133
D752	224650912 or	HZ9.1EB2 or
	224150912	05AZ9.1Y
D753-D757	223163	1SS133
D758-D766	223150,	US1040,
	223145 or	1S2076TD or
	223124	1S2473
D767	223163	1SS133 〈D/W〉
D768	223163	1SS133 〈D〉
	Osc. element	
X751	3010138	CSB600P,Ceramic
	Capacitors	
C751	354780109	1 μF,50V,Elect.
C755	395160107	1 μF,35V,Tantalum
C756	3020027 or	0.047F,5V or
	3000051	0.047F,5.5V,Super
C757	354721019	100 μF, 6.3V,Elect.
	Resistor	
R754	49163103405	10 kohm ×5,1/10W,Network
	Switches	
S751-S763	25035548	NPS-111-S510
	Cushion	
	28140738	

SWITCH PC BOARD(NAAF-3263-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
S764-S767	25035548	NPS-111-S510,Push switches

POWER SUPPLY CIRCUIT PC BOARD(NAPS-3264-1/1A/1B/1C)

CIRCUIT NO.	PART NO.	DESCRIPTION
T901	2300287	⚠ NPT-990D,Power transformer 〈D〉
	2300288	⚠ NPT-990G,Power transformer 〈G〉
	2300290	⚠ NPT-990Q,Power transformer 〈Q〉
	2300289	⚠ NPT-990DG,Power transformer 〈W〉
C901	3500065A	⚠ DE7150FZ 103PAC400V/125V,Capacitor IS
	27300601	⚠ Cover for C901 〈G/W/Q〉
R901	431523355	⚠ 3.3Mohm,1/2W,Solid resistor 〈D〉
S901	25035558	⚠ NPS-111-L520P,Power supply
	28175137	Insulated plate

NOTE: 〈D〉:Only 120V model
〈G〉:Only 220V model
〈W〉:Only Worldwide model
〈Q〉:Only 240V model

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTIC SHOCK. REPLACE ONLY WITH PART NUMBERS SPECIFIED.

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